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Testimony of Thomas G. Rader, President, Colorado Railcar, before the House Transportation and Infrastructure Committee, May 16, 2007.

Chairman Oberstar and Ranking Member Mica, thank you for the invitation to discuss with your committee today the significance of global warming in the rail transit industry: How it affects the industry and how the industry can respond to the threat it poses.

I, like you, am old enough to remember the magazine covers and numerous headlines proclaiming eternal winter and the coming ice age. Yet, one does not have to accept all of the theories of the day to realize that the time has come to redouble our efforts to reduce fossil fuel consumption and the consequent emissions.

Furthermore, it is time to utilize all of the tools at hand to accomplish this goal.

The Congress of the United States, and specifically this committee, can take several key steps toward significantly reducing the consumptions of fossil fuel in our country by understanding and encouraging the utilization of technology developed and tested during the last four years.

The ever increasing cost of fossil fuels means that the cost of travel, and specifically commuting, is pushing more Americans to utilize more efficient forms of travel, including rail transit. This growth means that rail system capacities must rise and that new rail systems will be created. You can insure that these expanding and new systems contribute to the reduction in fossil fuel consumption and emissions by encouraging the use of newly demonstrated and efficient technologies like the modern Clean Diesel Multiple Unit Train.

When we study the benefits of the Clean Diesel Multiple Unit Train, it becomes obvious why they are so popular in Europe and elsewhere. When we compare the operation of DMU trains to traditional locomotive hauled trains (in applications where DMUs are appropriate) using data from U.S. transit agencies we get some astounding results that are quite relevant to the subject of today's hearing. Clean Diesel Multiple Unit Trains will produce:

- **50 % REDUCTION IN FUEL CONSUMPTION**
- **68 % REDUCTION IN EMISSIONS**
- **75 % REDUCTION IN NOISE**
- **OPERATING COST REDUCTIONS EQUAL TO TWICE THE CAPITAL COST OF THE DMU OVER ITS 30 YEAR LIFE**

- **REDUNDANT SYSTEMS DESIGNED FOR INCREASED RELIABILITY & SAFETY**
- **SUBSTANTIALLY REDUCED CAPITAL COSTS FOR STATIONS, PARKING TRACKS & MAINTENANCE FACILITIES**
- **NO INCREASE IN INITIAL TOTAL CAPITAL COST TO ACHIEVE THESE BENEFITS**

Therefore, the development of this technology and the manufacture of DMUs in the U.S., to U.S. standards, addresses many issues of importance to this committee and to the U.S. citizenry as a whole.

CONTRIBUTE TO ENERGY SECURITY

By reducing the fuel consumption per passenger mile by 50% or more, the DMU technology could save millions of gallons of fuel per year for rail operators. This is a conservation measure whose capital cost is self-liquidating over the life of the railcar. This is a significant source of fuel conservation that will help to reduce our dependence on imports of foreign oil.

CONTRIBUTE TO IMPROVED AIR QUALITY

By reducing engine exhaust emission by 68% or more per passenger mile, the DMU technology could save thousands of pounds of emissions from entering our atmosphere. And not just coincidentally, rail systems where DMUs shows the greatest potential returns are concentrated in many of our non-attainment or near non-attainment areas.

DEVELOP U.S. TECHNOLOGICAL KNOW-HOW

Two years ago I testified that “the principal reason that we had not enjoyed the benefits of DMUs in the U.S. was that there were no U.S. owned manufacturers with the incentive to develop advanced cars for the nascent U.S. market. That in fact, foreign manufacturers had brought their structurally non-compliant railcars to the U.S., demonstrated them and then explained that the U.S. just needed to change its standards of strength and safety so that their non-compliant cars could be operated here. This campaign continues to this day.”

Today, I am pleased to report that due the joint funding of the Federal Railroad Administration (at the direction of Congress) and the Florida Department of Transportation, Clean Diesel Multiple Unit Trains are in use in South Florida.

In South Florida they are producing a savings of more than 50% in fuel per seat mile and at least a 70% reduction in emissions per seat mile compared to the older locomotive hauled technology also in service there.

Thus, the development of the technological know-how in the U.S. will assure us that we will never again be deprived of the ability to develop uniquely American products that serve to benefit the American people.

CREATE U.S. MANUFACTURING JOBS

The development of the Clean Diesel Multiple Unit Train in the United States is already creating well-paying manufacturing jobs in Colorado, Oregon, Georgia, Pennsylvania, California, Florida, Illinois and numerous other states. Over 98% of the components of the U.S. Clean Diesel Multiple Unit Train are manufactured in the U.S. and they comprise 92% of the value of the railcar.

MAKE RAIL TRANSIT MORE AFFORDABLE TO AMERICANS

By substantially reducing the operating costs of rail transit operations, the U.S. Clean Diesel Multiple Unit Train makes rail transit a more affordable, efficient transportation option for America. At a time when every cost associated with passenger transport, from highways to airports to trains, is escalating, here is a technology that can actually reduce the cost of a transport mode.

INCREASE SAFETY BY MEETING ALL FRA AND APTA REGULATIONS AND STANDARDS

The development of the U.S. DMU means that no one has to compromise the regulations established by the Federal Railroad Administration and the standards of the American Public Transportation Association in order to have a cost competitive commuter or intercity rail system. No one has to accept a reduced standard of strength or safety in order to enjoy the benefits of a DMU.

In fact, Colorado Railcar has developed the largest passenger cars in the world to FRA standards. These super cars are available as both Clean Diesel self propelled cars or as non-propelled coaches. They make a major contribution to the reduction of the cost of expanding or creating rail transit systems. They are so efficient that they even produce lower total emissions per seat mile than electric train systems while reducing the total system cost by hundreds of millions of dollars.

Yes, it is true, electric vehicles are not "Zero Pollution" as commonly held. They use electricity generated principally by fossil fuels in the U.S. When one uses the average emissions per kilowatt hour of all U.S. electric power generators, the Clean Diesel Multiple Unit Train actually produces fewer total emissions per seat mile than a comparable electric train set. Yet a rail transit system constructed for the Clean DMU will cost literally hundreds of millions of dollars less to build and operate than an electrified system.

How can this Committee insure that expanding and new rail transit systems use the best available technology to reduce fossil fuel consumption and reduce emissions?

First: Encourage the FTA to reward systems that reduce fossil fuel consumption and emissions by increasing the percentage of match for those who meet the goals of reduction.

Second: Work with other committees to assure the continuance of the research and development tax credit that incentivizes U.S. companies to continue to develop advanced technologies that achieve the goals.

Third: Continue to encourage and fund demonstration programs at the FRA which get these new technologies into the field where they can be proven and subsequently adopted by rail transit agencies.

Chairman Oberstar and Ranking Member Mica, I again thank you for this opportunity to appear on behalf of the safe, efficient and already low emissions rail transit industry.